

US010499899B2

(12) **United States Patent**  
**Lee**

(10) **Patent No.:** **US 10,499,899 B2**  
(45) **Date of Patent:** **Dec. 10, 2019**

(54) **MEDICAL TUBE FIXING APPARATUS**

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(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 448 days.

(21) Appl. No.: **15/315,862**

(22) PCT Filed: **Dec. 24, 2015**

(86) PCT No.: **PCT/KR2015/014255**

§ 371 (c)(1),  
(2) Date: **Dec. 2, 2016**

(87) PCT Pub. No.: **WO2017/014378**

PCT Pub. Date: **Jan. 26, 2017**

(65) **Prior Publication Data**

US 2017/0189587 A1 Jul. 6, 2017

(30) **Foreign Application Priority Data**

Jul. 20, 2015 (KR) ..... 10-2015-0102628

(51) **Int. Cl.**

**A61B 17/04** (2006.01)  
**A61M 1/00** (2006.01)  
**A61M 25/02** (2006.01)

(52) **U.S. Cl.**

CPC ..... **A61B 17/04** (2013.01); **A61B 17/0401** (2013.01); **A61M 1/00** (2013.01);  
(Continued)

(58) **Field of Classification Search**

CPC .. **A61M 2025/0266**; **A61M 2025/0286**; **A61B 17/04**; **A61B 17/0401**; **A61B 17/064**  
See application file for complete search history.

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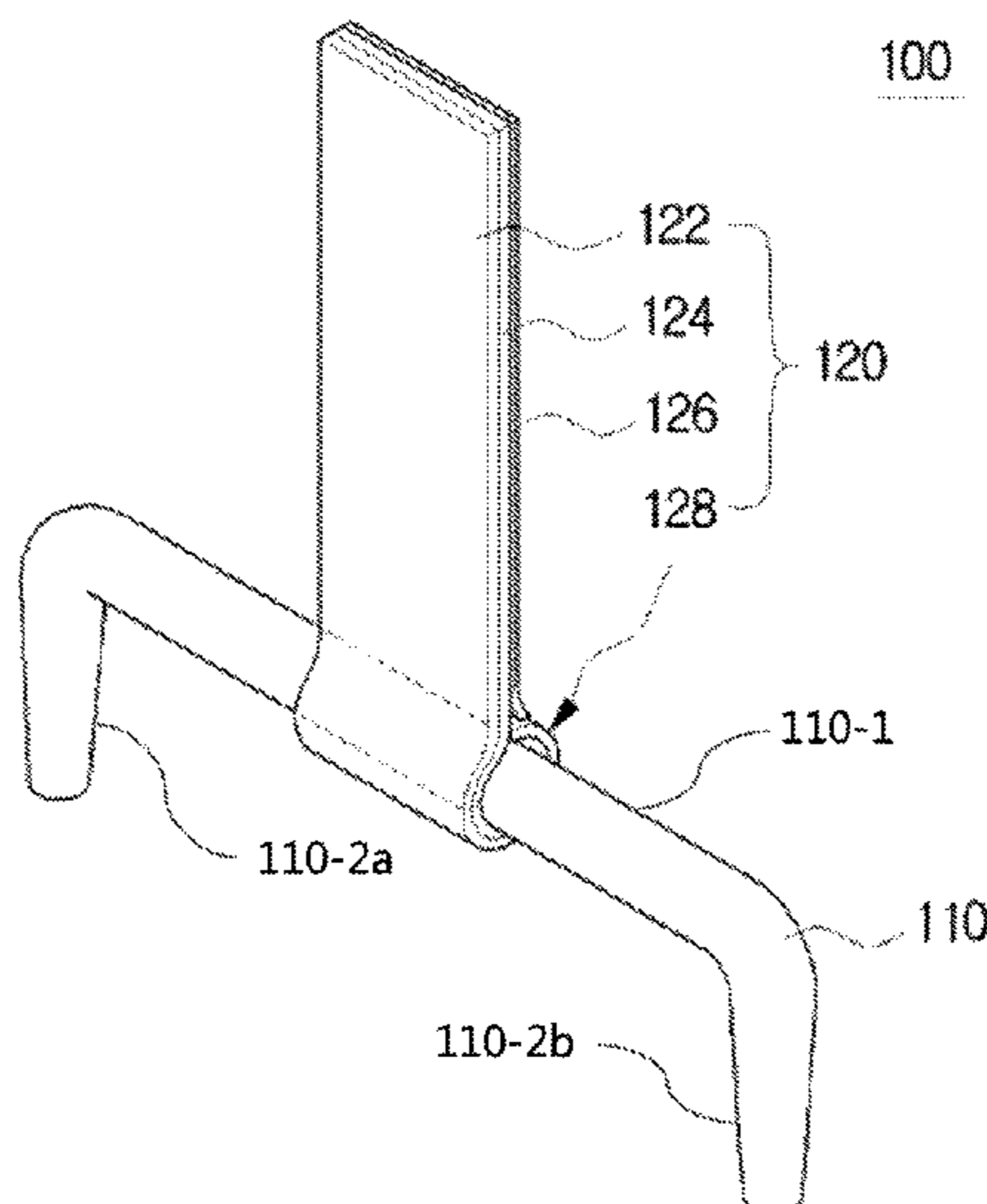
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(57) **ABSTRACT**

The present disclosure relates to a medical tube fixing apparatus which includes an adhesive member for securing the medical tube. The medical tube is inserted into the incised surgical site of the patient to discharge blood, body fluids, and the like to the outside. The surgical site where the medical tube is inserted is sutured with staples or suture threads. The adhesive member is made of a strip or band shaped tape-like material. The adhesive member is fixedly coupled at one end to the staple or the suture thread which sutures the patient's skin, and adheres to the outer surface of the medical tube to fix the medical tube together with the staple or suture. An operator can quickly and conveniently fix the medical tube to the patient's skin using the adhesive member. It is easy to manufacture the medical tube fixing apparatus, and manufacturing cost can be reduced.

**5 Claims, 13 Drawing Sheets**



(52) **U.S. Cl.**  
 CPC ..... *A61M 1/008* (2013.01); *A61M 1/0086*  
 (2014.02); *A61M 2025/0286* (2013.01)

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FIG. 1

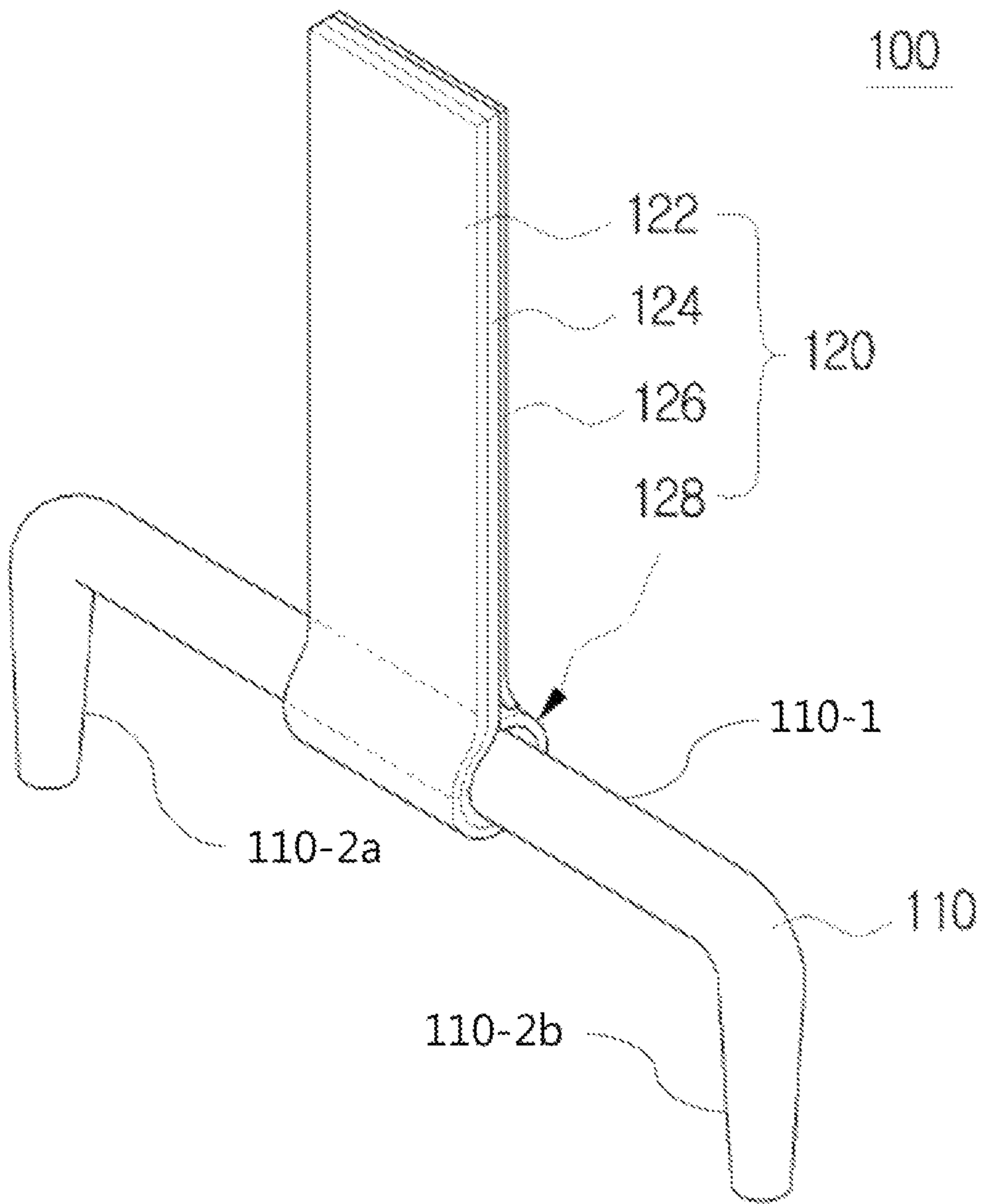


FIG. 2

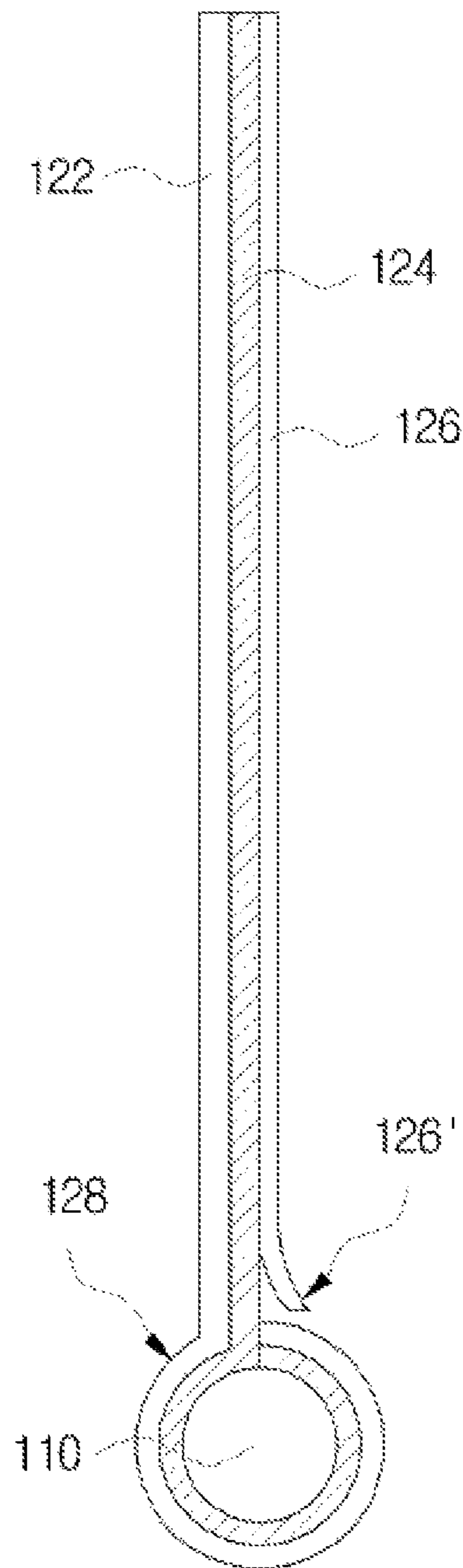


FIG. 3

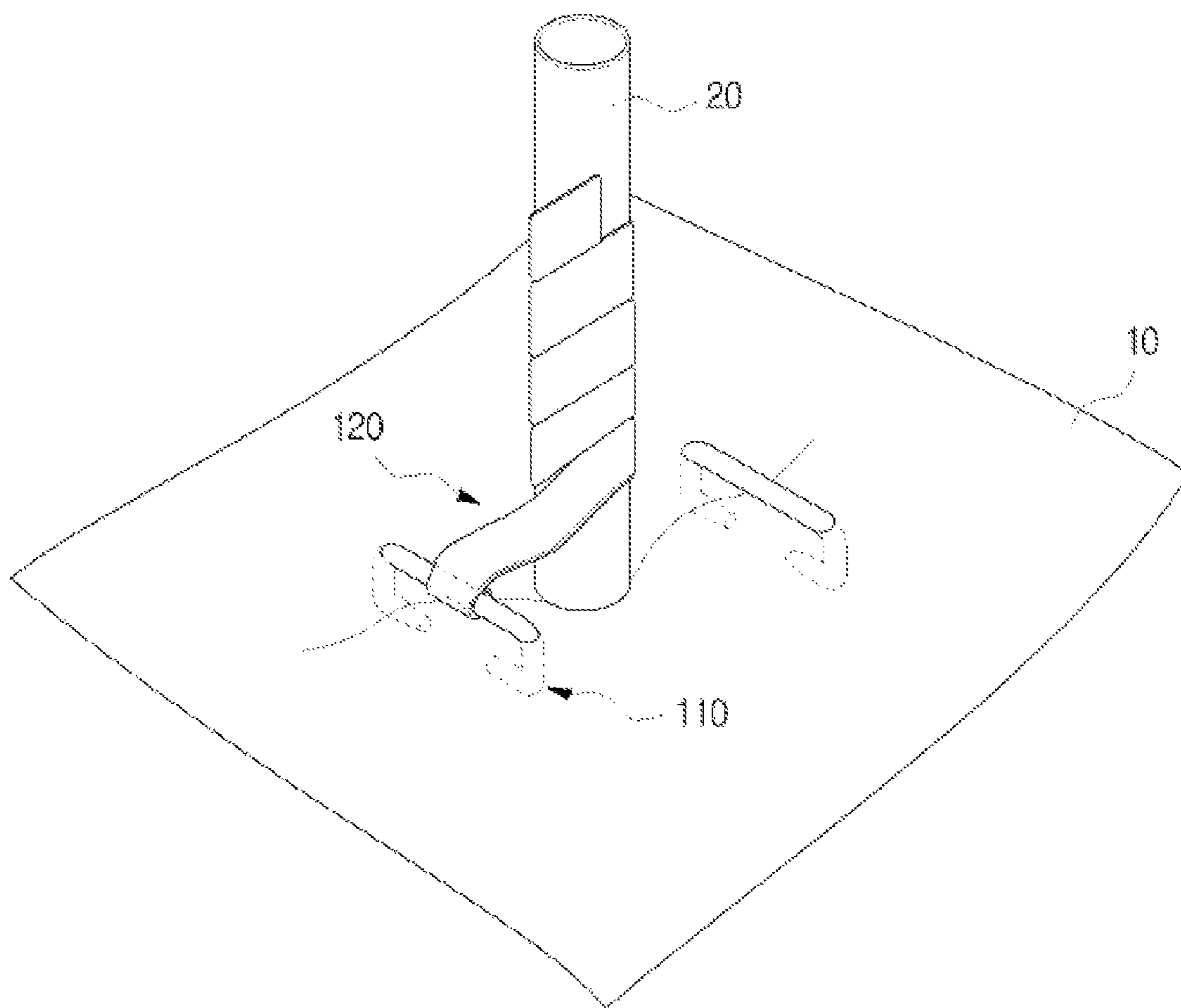


FIG. 4

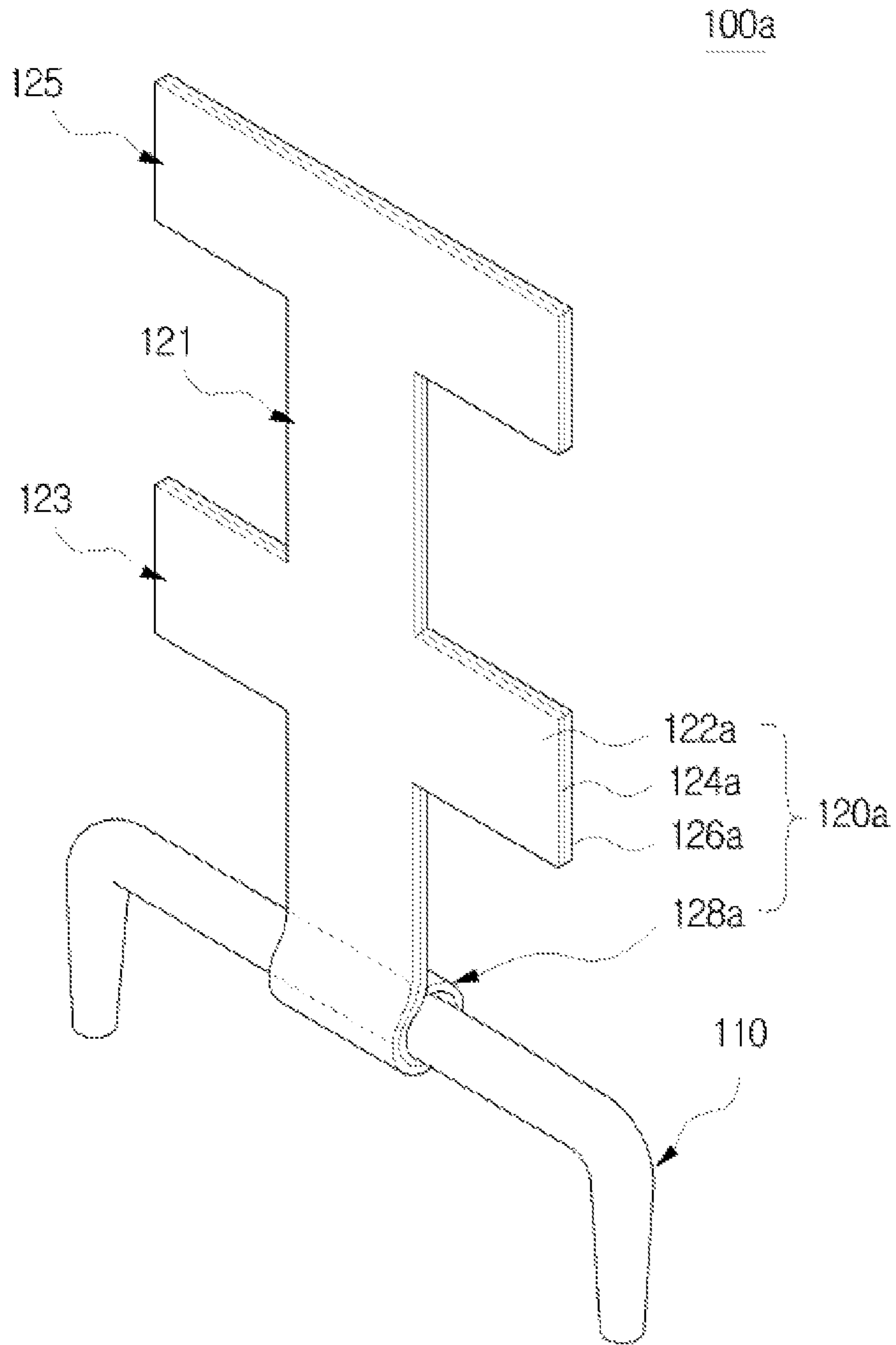


FIG. 5

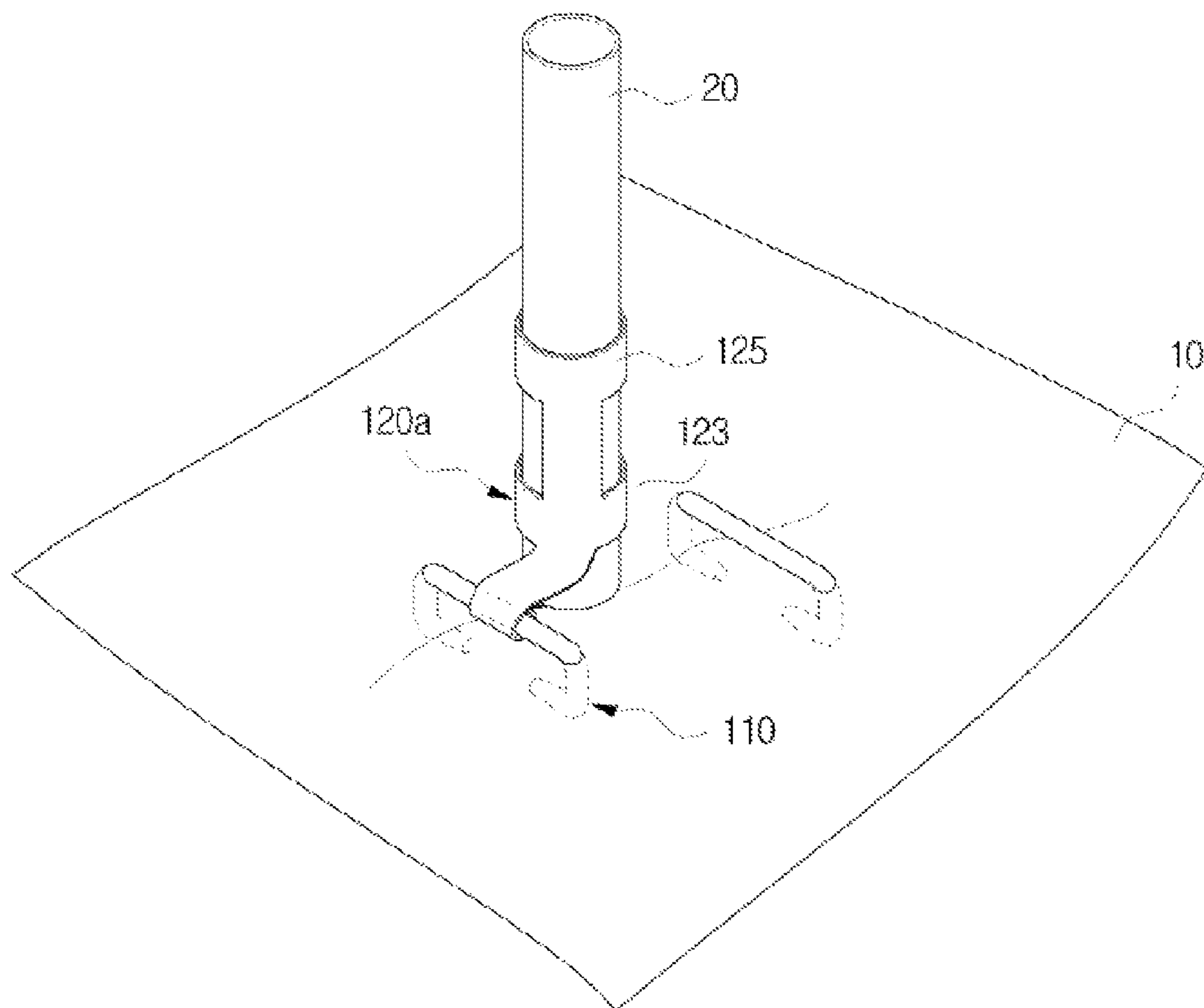


FIG. 6

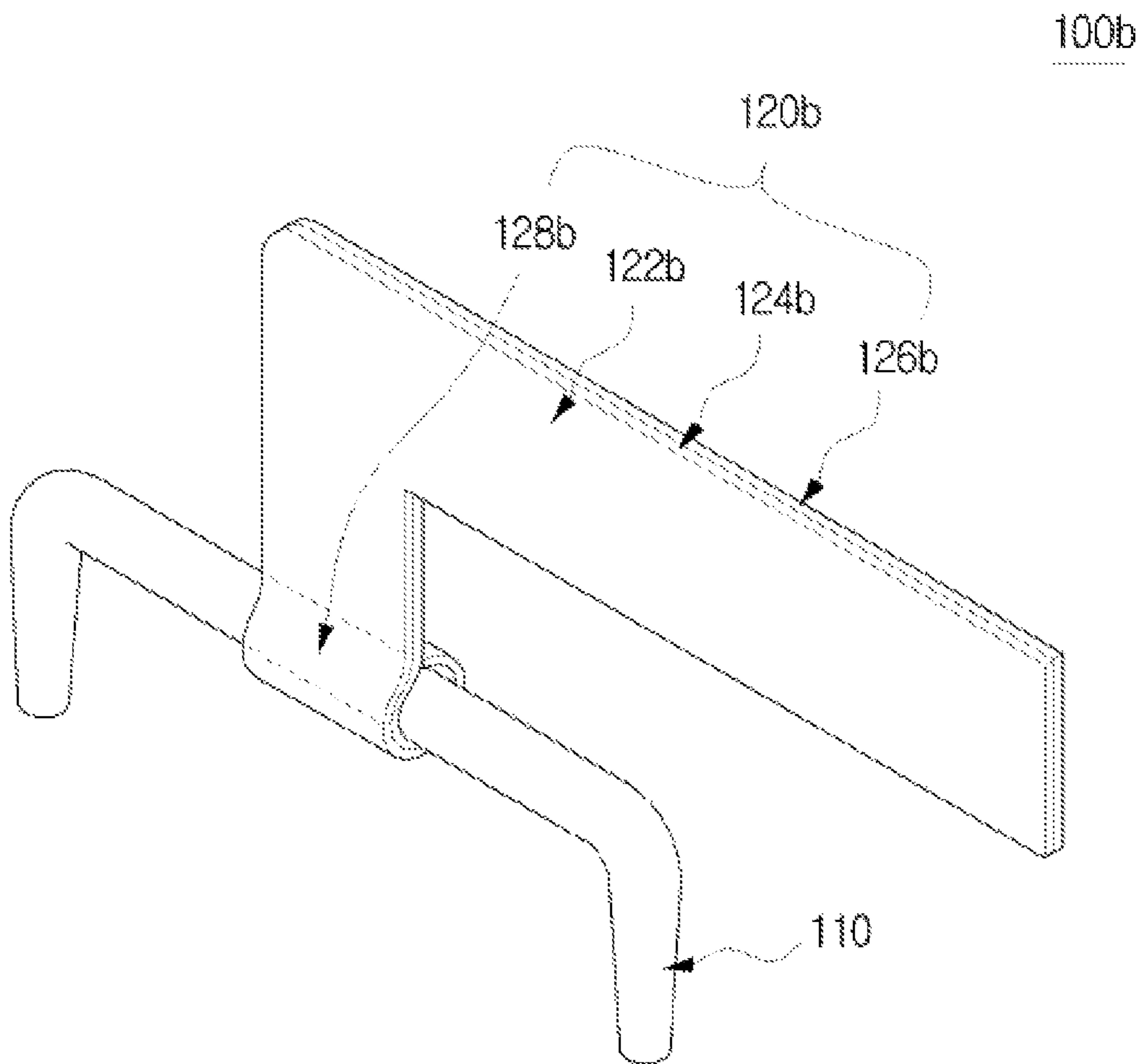




FIG. 7

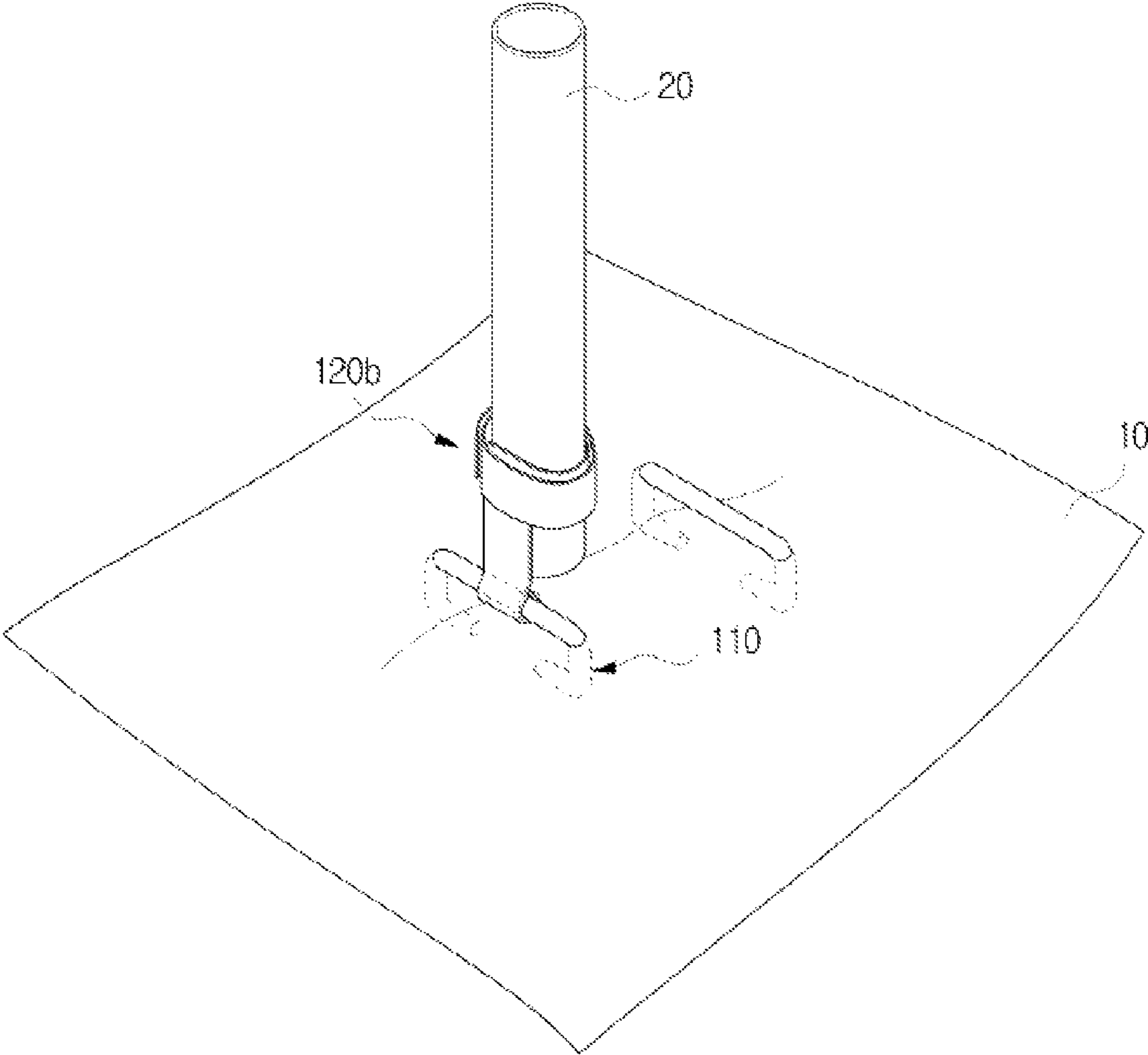


FIG. 8

200

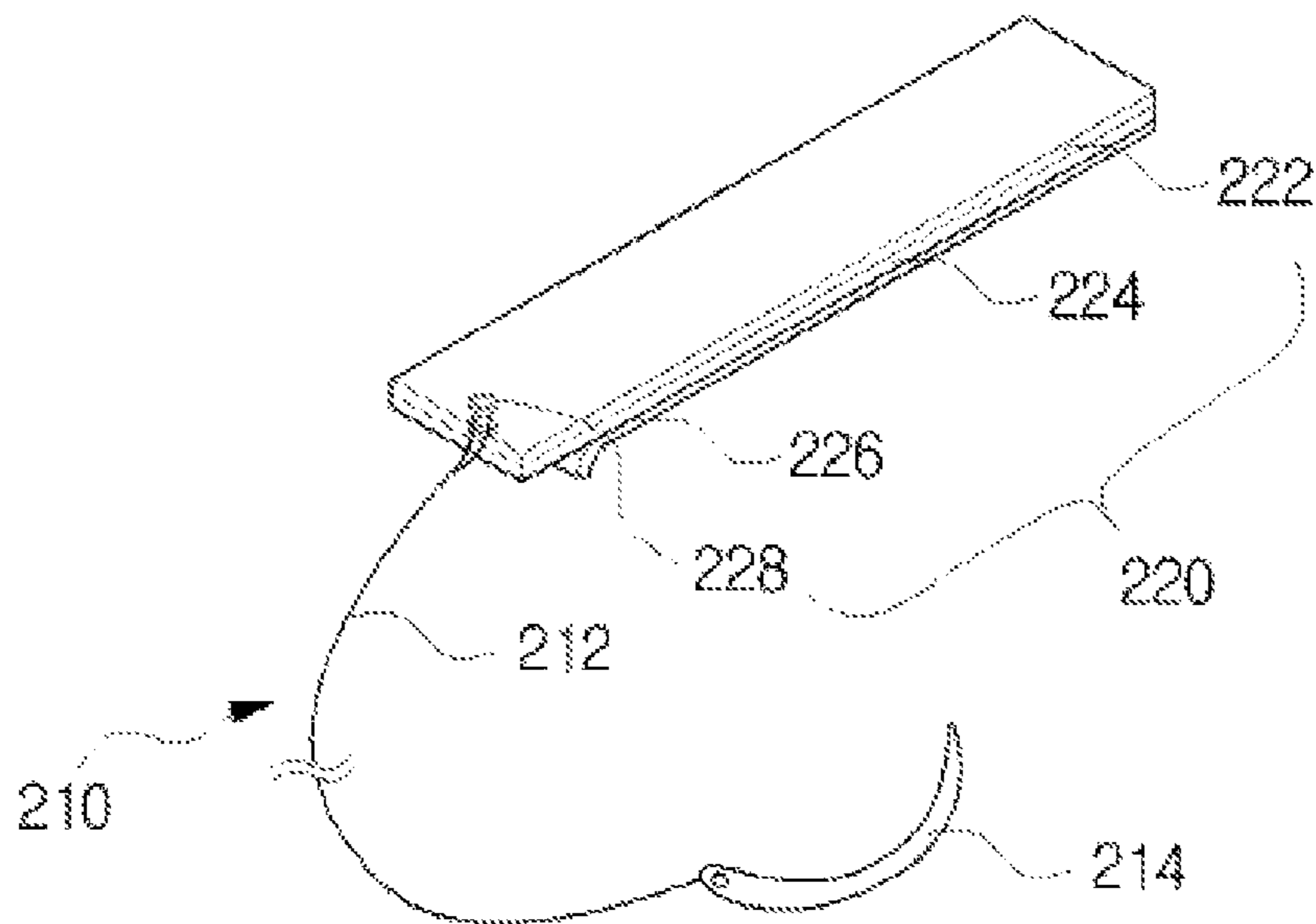


FIG. 9A

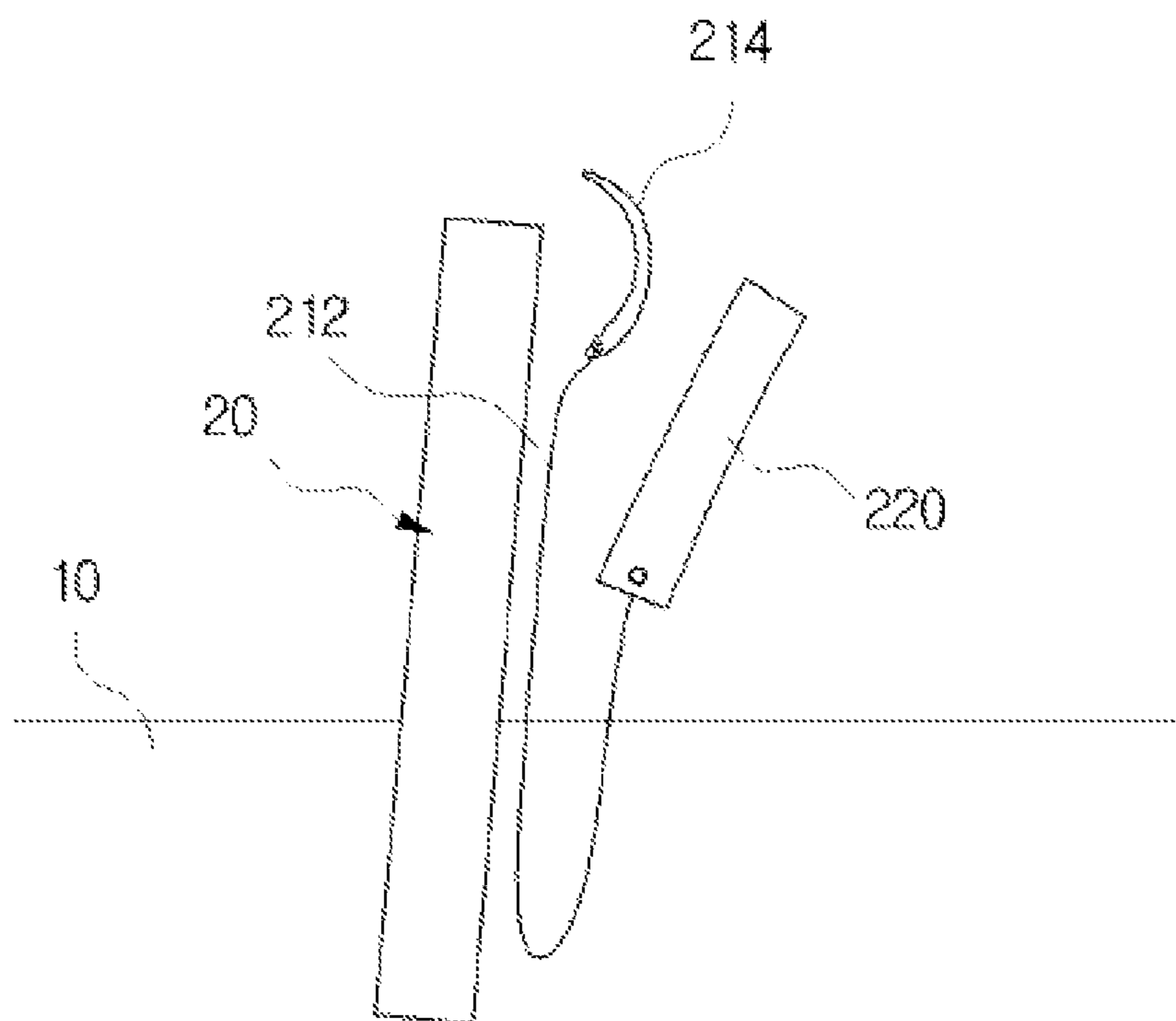


FIG. 9B

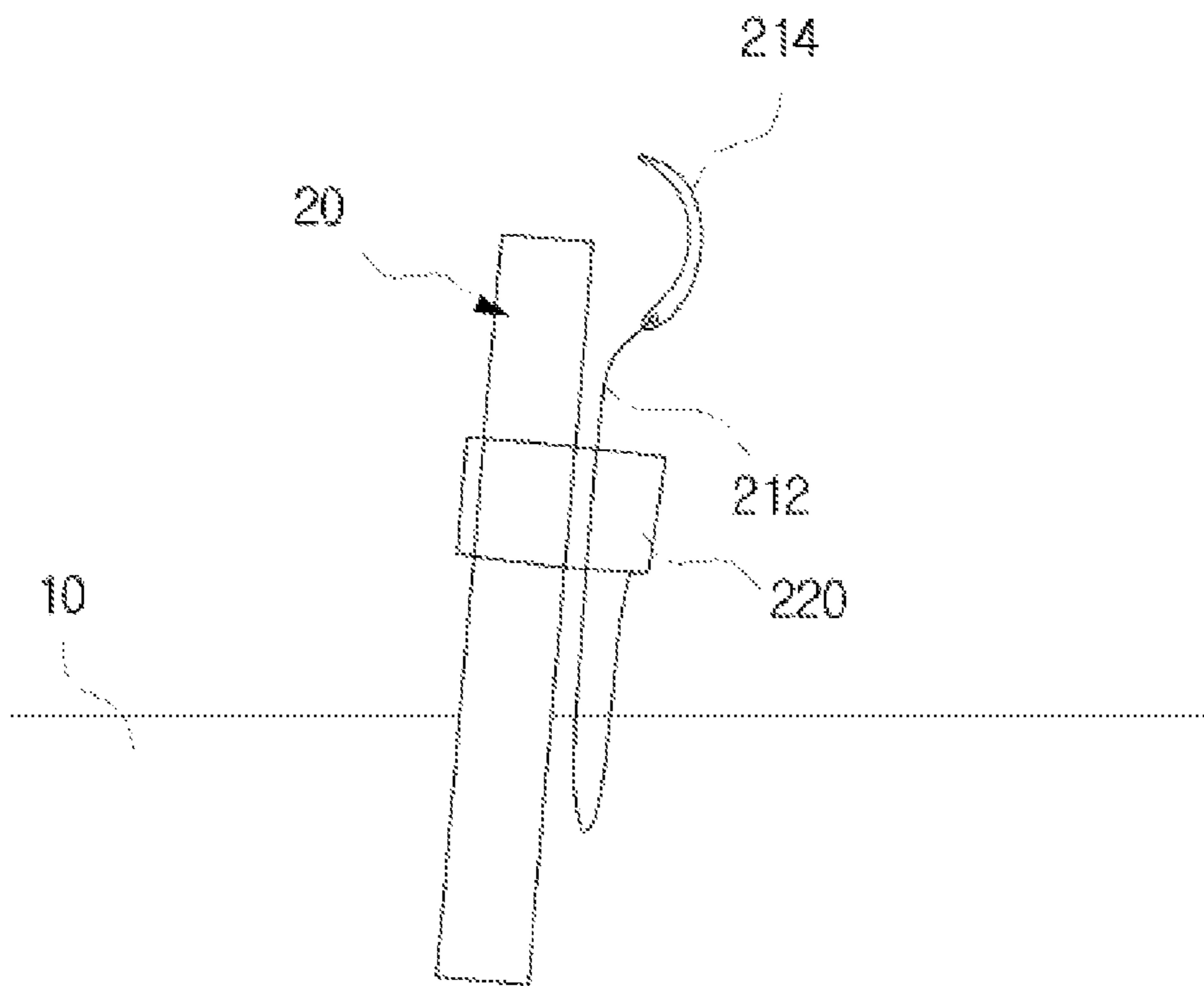


FIG. 10

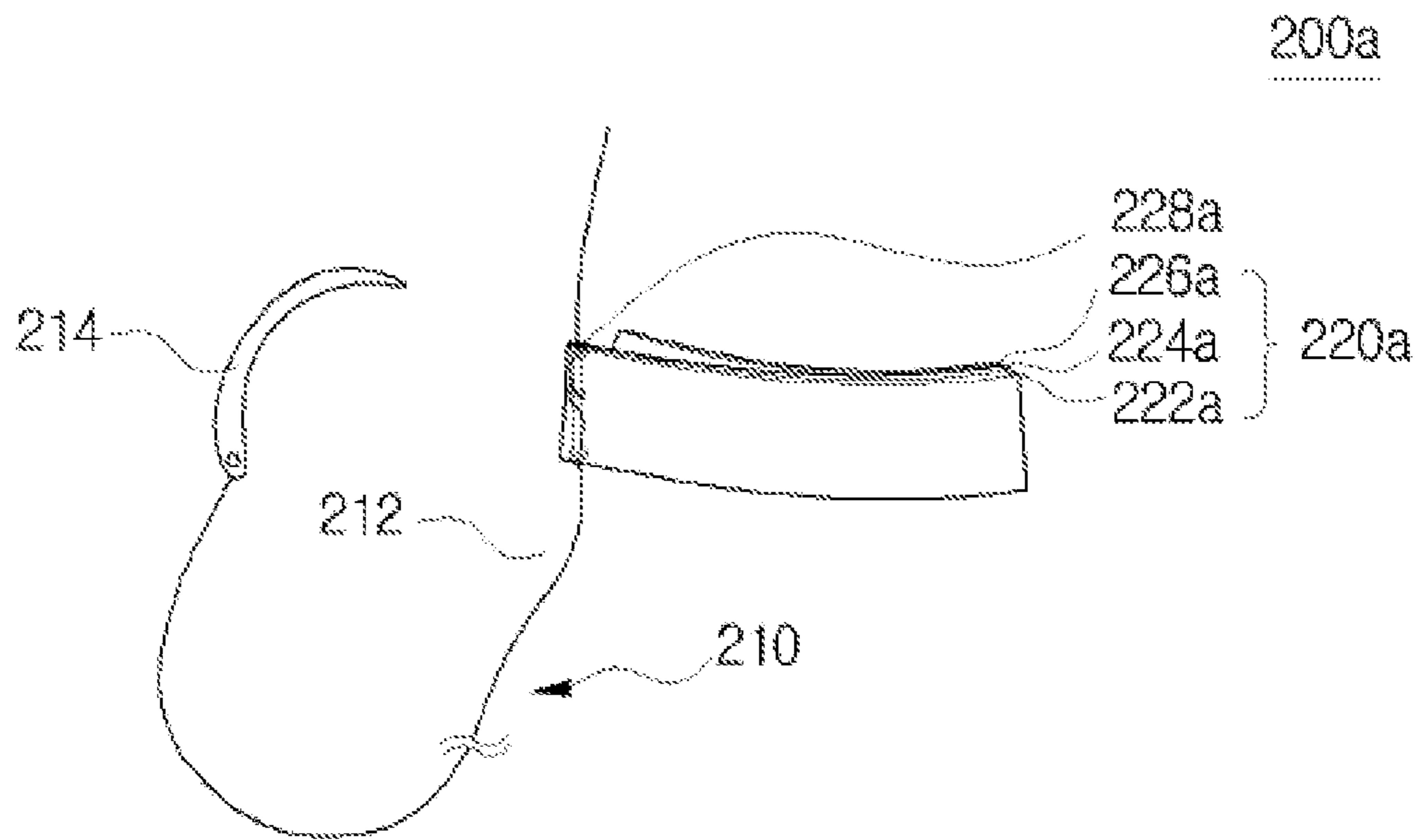


FIG. 11A

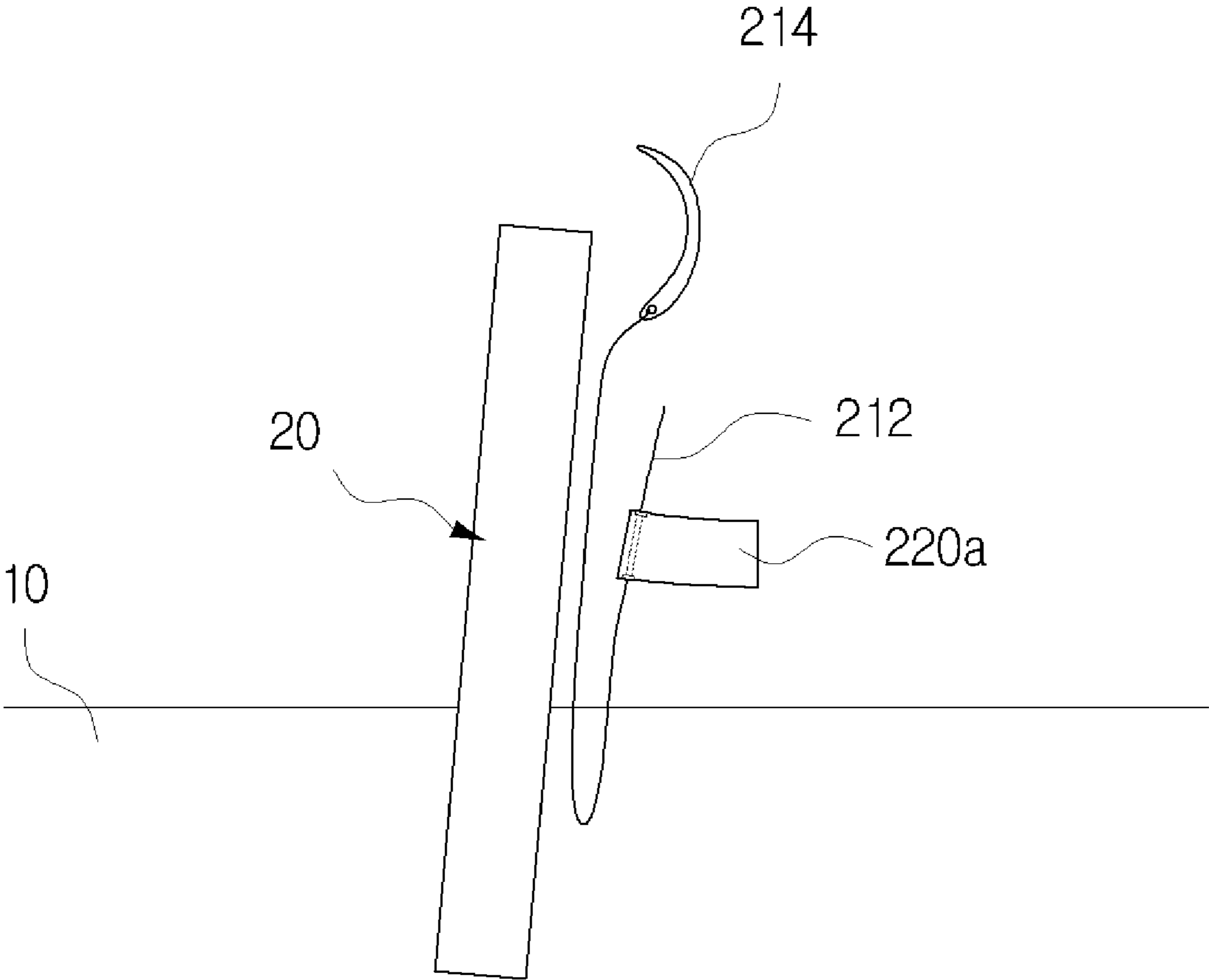
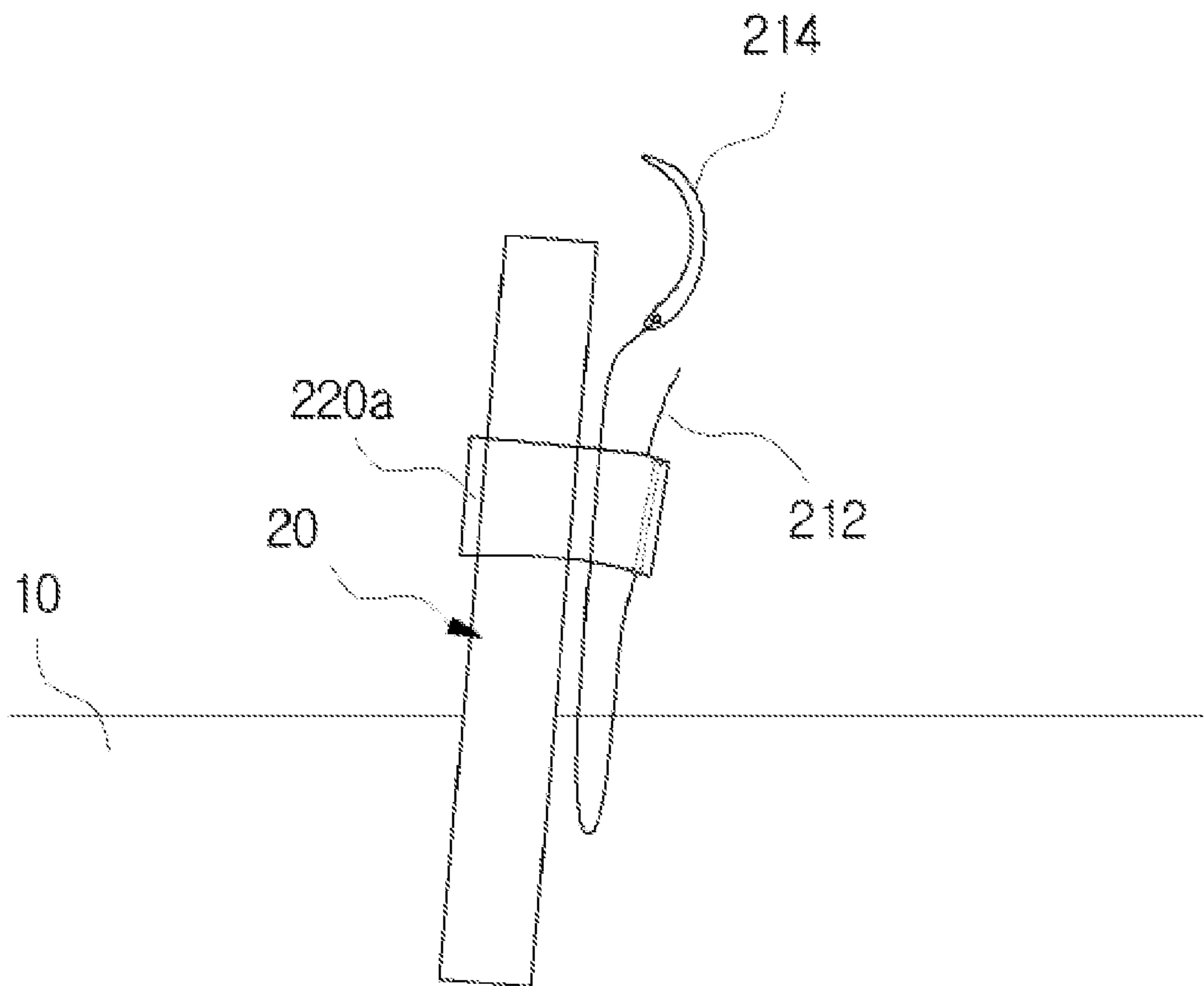


FIG. 11B



**MEDICAL TUBE FIXING APPARATUS****CROSS-REFERENCE TO RELATED APPLICATION**

This application is a U.S. National Stage Application of International application No. PCT/KR2015/014255, filed on Dec. 24, 2015. This application claims priority to and benefit of Korean Patent Application No. 10-2015-0102628, filed on Jul. 20, 2015 before the Korean Intellectual Property Office (KIPO), the disclosures of which are incorporated by reference in their entirety herein.

**BACKGROUND****1. Technical Field**

The present disclosure relates to a medical tube fixing apparatus, and more particularly to a medical tube fixing apparatus by which a medical tube can be easily fixed by using a band-shaped adhesive member, which may allow to obtain the same results regardless of a practitioner and to reduce the operation time and the risk of infection after surgery.

**2. Discussion of the Related Art**

In general, after patients have been treated in a surgery, body fluids such as blood or pus may be caught inside of the patient's body. In this case, a drainage apparatus is used, which allows the medical staff to quickly discharge the body fluids generated in the patient's organs to the outside for quick recovery of the patient.

In the drainage apparatus, a medical tube for discharging the body fluids to the outside is fastened and used. The medical tube may include widely used ones which are a catheter used for discharging bile or abscess from the liver or stomach to the outside of the human body, a urethral catheter inserted into the bladder for discharging the excrements, or a drain tube for discharging the body fluid generated in the internal organs of the patient to the outside in a state that its one part is inserted into the human body and its other part is exposed to the outside of the body.

In recent years, a medical skin stapler has been widely used for sealing a surgical site in a state where the medical tube is inserted after a patient's operation is completed. The medical skin stapler, meaning a device for sealing the skin using staples, is an improvement of the conventional method in which an incised site of the skin is sealed with a suture thread and a needle at the time of a surgical operation or a cosmetic surgery. The staple used in the skin stapler has a substantially  $\sqcap$  shape. The staple is loaded on a cartridge of the skin stapler, and both ends of the staple are bent inward to seal the skin when it is pushed by and released from the skin stapler. In order to fix the medical tube exposed to the outside in such a sealed state, it is fixed to the skin using a method of directly tying it with a thread to a general medical band or the skin.

However, the medical band has a problem that the adhesive strength is weakened when it is used for a long time and therefore it should be frequently replaced. It also has a problem that a gap is grown between the medical band and the medical tube whenever the patient moves and the adhesive force becomes weakened, which causes the medical tube to be pushed out to the outside.

There is also a problem that the medical tubing may be detached and organs of the patient may be damaged due to insufficient adhesive force of the medical band. There are also other problems such as occurrence of infection due to

leakage of pleural fluid caused by the detachment of the medical tube, and induction of emphysema of the lung due to air infiltration.

In addition, the fixing method of tying with the thread is not robust, so that the medical tube can be moved and thus the medical tube inserted into the inside of the patient's body can be released to the outside.

In view of these points, there is a prior art which is Korean Patent Registration No. 10-1064844 (published on Sep. 14, 2011) entitled "A Medical Tube Fixing Apparatus."

However, the fixing apparatus for the medical tube has the following disadvantages. A fixed cap, a tube guide member, a tape, and the like must be separately manufactured, so that the manufacturing cost will be increased. In addition, it takes a long time to install the fixing apparatus of the medical tube fixed by the tape on the patient, and it is not fixed firmly during long-term use.

In addition, since the tape directly adheres to the skin, inflammation or the like may be caused during repeated use for a long period of time. The fixing apparatus is expensive to use because it is used as a disposable medical apparatus due to the nature of the medical apparatus attached directly to the patient's body and because when the fixing apparatus of the medical tube is replaced, the whole apparatus must be replaced.

**SUMMARY**

The present disclosure is directed to providing a medical tube fixing apparatus which can easily fix a medical tube to obtain the same result regardless of a practitioner.

The present disclosure is also directed to providing a medical tube fixing apparatus which can shorten the operation time and reduce the risk of infection after surgery.

In addition, the present disclosure is directed to providing a medical tube fixing apparatus using a medical adhesive member.

According to exemplary embodiments of the present disclosure, a medical tube fixing apparatus may include an adhesive member which is coupled to a staple and adheres to an outer surface of a medical tube. By fixing the medical tube to the staple using the adhesive member, the fixing operation of the medical tube becomes simpler and easier, so that the same result can be obtained irrespective of the practitioner. The risk of infection after surgery can be reduced.

According to exemplary embodiments of the present disclosure, there is provided a medical tube fixing apparatus, including: a staple for suturing an incised site of a patient's skin into which a medical tube is inserted; and an adhesive member, being fixed at one end to a center of the staple and adhering to an outer surface of the medical tube, for fixing the medical tube to the staple.

In an exemplary embodiment of the present disclosure, the adhesive member may be formed in a strip or band shape extending by a predetermined length in a longitudinal direction of the medical tube, and be adhesively wound around the outer surface of the medical tube in a plurality of turns in a spiral shape along the longitudinal direction.

In an exemplary embodiment of the present disclosure, the adhesive member may include a first portion fixedly coupled to a center of the staple and a second portion extending from the first portion in a direction perpendicular to the medical tube by a predetermined length so as to form a bent strip or band shape, and be adhesively wound in a horizontal direction around the outer surface of the medical tube at least one time.



In an exemplary embodiment of the present disclosure, the adhesive member may include a main adhesive portion, extending in a longitudinal direction of the medical tube by a predetermined length, for adhering to the outer surface of the medical tube in the longitudinal direction; a fixing portion having one end of the main adhesive portion fixedly coupled to the center of the staple; a first auxiliary adhesive portion, extending from both sides of the main adhesive portion adjacent to the fixing portion in opposite horizontal directions, for adhesively wrapping the outer surface of the medical tube in the horizontal direction; and a second auxiliary adhesive portion, positioned above the first auxiliary adhesive portion and extending from both sides of the main adhesive portion in opposite horizontal directions, for adhesively wrapping the outer surface of the medical tube in the horizontal.

In an exemplary embodiment of the present disclosure, the adhesive member may include a transparent or semi-transparent tape; an adhesive formed on one side of the tape and adhering to the outer surface of the medical tube; and a release paper which is attached to the adhesive and is removed when adhering to the outer surface of the medical tube.

According to other exemplary embodiments of the present disclosure, there is provided a medical tube fixing apparatus to be used with a suture thread.

The medical tube fixing apparatus may include a suture thread, being joined to a needle, for suturing an incised site of a patient's skin into which a medical tube is inserted; and an adhesive member, being provided in a strip or band shape and fixedly coupled to the suture thread at one end, for adhesively wrapping an outer surface of the medical tube together with the suture thread a plurality of times outside the skin sutured by the suture thread, and fixing the medical tube by the suture thread.

In an exemplary embodiment of the present disclosure, the adhesive member may include a stopper for engaging with one end of the suture thread in the longitudinal direction of the suture thread.

In another exemplary embodiment, the adhesive member may include a stopper for engaging with one end of the suture thread in the width direction of the suture thread.

As described above, the medical tube fixing apparatus of the present disclosure can be easily manufactured, thereby reducing the manufacturing cost of it and the medical cost burden on the patient. In addition, with the medical tube fixing apparatus it is possible to fix the medical tube at the same time as sealing the incised surgical site. Therefore, the operator can quickly and conveniently install it.

Further, the medical tube fixing apparatus of the present disclosure can shorten the operation time and reduce the risk of postoperative infection by fixing the medical tube using staples, suture threads, and the like.

In addition, the medical tube fixing apparatus of the present disclosure can provide the same result regardless of the practitioner by easily fixing the medical tube using the adhesive member.

In addition, the present disclosure provides the medical tube fixing device in various forms using staples, suture threads, and the like, thereby fixing the medical tube to be suitable for an incised skin at the time of surgery.

#### BRIEF DESCRIPTION OF THE DRAWINGS

FIG. 1 illustrates a configuration of a medical tube fixing apparatus according to a first exemplary embodiment of the present disclosure.

FIG. 2 is a sectional view showing a configuration of the medical tube fixing apparatus shown in FIG. 1.

FIG. 3 is a view showing a state where the medical tube is fixed using the medical tube fixing apparatus shown in FIG. 1.

FIG. 4 illustrates a configuration of a medical tube fixing apparatus according to a second exemplary embodiment of the present disclosure.

FIG. 5 is a view showing a state where the medical tube is fixed using the medical tube fixing apparatus shown in FIG. 4.

FIG. 6 illustrates a configuration of a medical tube fixing apparatus according to a third exemplary embodiment of the present disclosure.

FIG. 7 is a view showing a state where the medical tube is fixed using the medical tube fixing apparatus shown in FIG. 6.

FIG. 8 illustrates a configuration of a medical tube fixing apparatus according to a fourth exemplary embodiment of the present disclosure.

FIG. 9A and FIG. 9B are views showing a state where the medical tube is fixed using the medical tube fixing apparatus shown in FIG. 8.

FIG. 10 illustrates a configuration of a medical tube fixing apparatus according to a fifth exemplary embodiment of the present disclosure.

FIG. 11A and FIG. 11B are views showing a state where the medical tube is fixed using the medical tube fixing apparatus shown in FIG. 10.

#### DETAILED DESCRIPTION OF THE EMBODIMENTS

The embodiments of the present disclosure may be modified into various forms, and the scope of the present disclosure should not be construed as being limited by the embodiments described below. The present embodiments are provided to enable those skilled in the art to more fully understand the present disclosure. Accordingly, the shape and the like of the elements shown in the drawings may be exaggerated in order to emphasize a clearer description.

Hereinafter, embodiments of the present disclosure will be described in detail with reference to FIGS. 1 to 11.

FIG. 1 is a view showing a configuration of a medical tube fixing apparatus according to a first exemplary embodiment of the present disclosure. FIG. 2 is a cross-sectional view showing the configuration of the medical tube fixing apparatus shown in FIG. 1, and FIG. 3 is a view showing a state in which the medical tube is fixed using the medical tube fixing apparatus shown in FIG. 1.

Referring to FIGS. 1 to 3, a medical tube fixing apparatus 100 according to the first exemplary embodiment of the present disclosure is to fix a medical tube 20 for quickly discharging a blood tube, a body fluid, and the like generated in a lesion or an affected part of a patient to the outside when the patient is operated.

A staple 110 includes a flat top crown 110-1 and two legs 110-2a and 110-2b extending from both ends of the flat top crown to be perpendicular to the flat top crown. When the medical tube 20 is inserted into the surgical site of the patient, the medical tube fixing apparatus 100 couples the adhesive member 120 to the staple 110 that seals the surgical site where the medical tube 20 is inserted, attaching the adhesive member 120 to the outer circumferential surface of the medical tube 20 so as to firmly fix the medical tube 20 to the patient's skin.

## 5

Specifically, in an exemplary embodiment, the medical tube holding apparatus **100** of this embodiment may include the staple **110** and the adhesive member **120**.

The staple **110** may be fastened to the periphery of the patient's affected part of into which the medical tube **20** is inserted, for example, using a skin stapler or the like to seal the incised surgical site.

The adhesive member **120** may be provided with a strip- or band-shaped medical adhesive tape having a predetermined length and width. In an exemplary embodiment, the adhesive member **120** may include a tape **122**, an adhesive **124** adhering to one surface of the tape **122**, and a release paper **126** adhering to the other surface of the adhesive **124**. The adhesive member **120** is provided with a fixing portion **128**, one end of which is fixedly coupled to the center of the staple **110**.

In an exemplary embodiment, the tape **122** may be made of a transparent or semitransparent material such as a resin film, a fiber material, or the like. The tape **122** may be made of a material having an elastic force.

In an exemplary embodiment, the adhesive **124** may be made of a double-sided adhesive tape that its one side adheres to one surface of the tape **122** and the release paper **126** is attached to its the other side. The other side of the adhesive **124** may be coated. The adhesive **124** may be made of an adhesive material of which adhesive force is not affected by the body temperature of the patient. The adhesive **124** may adhere to the outer circumferential surface of the medical tube **20** by a detachable adhesive material. The adhesive **124** may be made of an adhesive material such as an acrylic adhesive, a rubber adhesive, a urethane adhesive, or a silicone adhesive for use in medical bandages and tapes. These adhesive materials are already well known in the art, so a detailed description of them would not be given here.

In an exemplary embodiment, the release paper **126** may adhere to the coated surface of the adhesive **124** to protect an adhesive force of the adhesive **124**. A partial portion **126'** of the release paper **126** may be separated from the adhesive **124** so as to be easily separated from the coated surface of the adhesive **124** when the adhesive member **120** adheres to the outer circumferential surface of the medical tube **20**. When the adhesive member **120** adheres to the outer surface of the medical tube **20**, the release paper **126** is removed.

In an exemplary embodiment, one end of the adhesive member **120**, which forms the fixing portion **128**, may be fixedly coupled to the center of the staple **110**. The fixing portion **128** may be fixedly coupled to the staple **110** by the adhesive **124** and the tape **122**.

In an exemplary embodiment, the adhesive member **120** may be formed in the strip or band shape extending in the longitudinal direction of the medical tube **20** by a predetermined length as shown in FIG. 3. The adhesive member **120** may be adhesively wound around and along the outer surface of the medical tube **20** plural times in the form of spiral.

Therefore, the medical tube fixing apparatus **100** of this embodiment may be is so configured that when the medical tube **20** is inserted into the inside of the surgical site of the patient, the adhesive member **120** fixedly coupled to the staple **110** can adhere to the medical tube **20** while wrapping the medical tube **20** along the outer circumferential surface of the medical tube **20** plural times in the form of spiral.

The medical tubing fixing apparatus **100** can easily fix the medical tube **20** to the skin **10** of the patient using at least one staple **110**, which seals the incised surgical site adjacent the medical tubing **20**, and the adhesive member **120**.

## 6

FIG. 4 is a view showing a configuration of a medical tube fixing apparatus according to a second exemplary embodiment of the present disclosure, and FIG. 5 is a view showing a state in which a medical tube is fixed using the medical tube fixing apparatus shown in FIG. 4. Here, description of the elements of which functions are the same as or similar to those in the first exemplary embodiment will be omitted.

With reference to FIGS. 4 and 5, a medical tube fixing apparatus **100a** according to an exemplary embodiment may include a staple **110** for sealing or suturing the incised skin **10** of the patient near the medical tube **20** inserted into the patient's skin **10**, and an adhesive member **120a**, being fixedly coupled to the center of the staple **110** and adhering to the outer circumferential surface of the medical tube **20**, for fixing the medical tube **20** to the staple **110**.

Unlike the first embodiment, the adhesive member **120a** of this embodiment may include a main adhesive portion **121** adhering to the medical tube **20** in the longitudinal direction of the medical tube **20**, and first and second auxiliary adhesive portions **123** and **125**, each of which extends in opposite horizontal directions from both lateral ends of the main adhesive portion **121**, for adhesively wrapping upper and lower positions of the medical tube **20** adjacent to the staple **110**, respectively.

In an exemplary embodiment, the adhesive member **120a** may be formed by sequentially laminating a tape **122a**, an adhesive **124a** and a release paper **125a** so as to have the same sectional structure as that of the first exemplary embodiment. A fixing portion **128a** which is fixedly coupled to the center of the staple **110** may be formed at an end of the adhesive member **120a**.

The main adhesive portion **121** is extended in the longitudinal direction of the medical tube **20** by a predetermined length and adheres to the outer surface of the medical tube **20** in the longitudinal direction. Here, the fixing portion **128a** is disposed at one end of the main adhesive portion **121**.

In an exemplary embodiment, the first auxiliary adhesive portion **123** may be formed by the portions which extend from both lateral ends of the main adhesive portion **121** adjacent to the fixing portion **128a** in both opposite horizontal directions, respectively. The first auxiliary adhesive portion **123** is attached to the outer surface of the medical tube **20** while horizontally and adhesively wrapping the outer circumferential surface of the medical tube **20**.

The second auxiliary adhesive portion **125** may be spaced apart from the first auxiliary adhesive part **123** by a predetermined distance and may be formed by the two portions, extending from the other both lateral ends of the main adhesive portion **121** in opposite horizontal directions, respectively, so that they can adhesively wrap the outer circumferential surface of the medical tube **20** in the horizontal direction.

Therefore, the medical tube fixing apparatus **100a** of this embodiment can firmly fix the medical tube **20** by the first and second auxiliary adhesive portions **123** and **125** as shown in FIG. 5.

FIG. 6 illustrates a configuration of a medical tube fixing apparatus according to a third embodiment of the present disclosure, and FIG. 7 shows a state in which the medical tube is fixed using the medical tube fixing apparatus shown in FIG. 6. Here, description of the elements of which functions are the same as or similar to those in the first embodiment will be omitted.

Referring to FIGS. 6 and 7, the medical tube fixing apparatus **100b** of this embodiment may include a staple **110** and an adhesive member **120b**. The adhesive member **120b**

may have a shape bent at a right angle, and include a fixing portion **128b** for being fixedly coupled to the center of the staple **110**, and a band-shaped portion bent from the fixing portion **128b** in a direction perpendicular to the medical tube **20** and extended by a predetermined length.

The adhesive member **120b** may be formed by sequentially laminating a tape **122b**, an adhesive **124b** and a release paper **125b** so as to have the same sectional structure as that of the first embodiment. The adhesive member **120b** may have, at an end, a fixing portion **128b** which is fixedly coupled to the center of the staple **110**.

As shown in FIG. 7, in the medical tube fixing apparatus **100b** of this embodiment the adhesive member **120b** may be adhesively wound around the outer surface of the medical tube **20** at least once in the horizontal direction.

The medical tube fixing apparatuses **100**, **100a** and **100b** of the first to third embodiments described above can firmly fix the medical tube **20** to the patient's skin **10** using the staple **110**.

FIG. 8 illustrates a configuration of a medical tube fixing apparatus according to a fourth embodiment of the present disclosure. FIGS. 9A and 9B are views showing a state in which the medical tube is fixed using the medical tube fixing apparatus shown in FIG. 8.

Referring to FIGS. 8 to 9B, the medical tube fixing apparatus **200** of this embodiment may fix the medical tube **20** using a suturing member **210**.

To this end, the medical tube fixing apparatus **200** may include the suturing member **210** and an adhesive member **220**.

The suturing member **210** may include a needle **214** and a suture thread **212**. The needle **214** is coupled to one end of the suture thread **212** and the adhesive member **220** is fixedly coupled to the other end. The suturing member **210** can suture the incised skin near the medical tube **20** inserted into the patient's skin **10**.

In an exemplary embodiment, the adhesive member **220** may be provided in a strip or band shape. One end of the adhesive member **220** may be fixedly connected to the suture thread **212**. The adhesive member **220** may adhesively wrap the outer surface of the medical tube **20** along with the suture thread **212** plural times outside of the surgical site of the skin **10** sutured by the suture thread **212**. This adhesive member **220** can fix the medical tube **20** to the patient's skin **10** by fixing the medical tube **20** to the suture thread **212**. In this embodiment, the adhesive member **220** may be coupled to the other end of the suture thread **212** in the longitudinal direction of the suture thread **212**.

In an exemplary embodiment, the adhesive member **220** may be made of a medical adhesive tape having a strip or band shape and a predetermined length and width. The adhesive member **220** may include a tape **222**, an adhesive **224** bonded to one surface of the tape **222**, a release paper **226** attached to the other surface of the adhesive **224**, and a stopper **228** with which the suture thread **212** is coupled. The stopper **228** may be made of, for example, a hardened material and be fixed to the center of one end of the adhesive member **220**. The stopper **228** may function to couple the suture thread **212** with the adhesive member **220**, and to prevent the adhesive member **220** from being inserted into the patient's skin **10** by being followed by the suture thread **212** when the patient's incised skin **10** is sealed using the suturing member **210**.

Therefore, as shown in FIGS. 9A and 9B, the medical tube fixing apparatus **200** of this embodiment may be configured such that the incised site of the patient's skin **10** is sutured with the suture thread **212** and the needle **214**. Then, the

medical tube **20** may be wrapped plural times together with the suture thread **212** to be fixed by the adhesive member **220**.

FIG. 10 is a view showing a configuration of a medical tube fixing apparatus according to a fifth exemplary embodiment of the present disclosure. FIG. 11A and FIG. 11B are views showing a state in which the medical tube is fixed using the medical tube fixing apparatus shown in FIG. 10.

With reference to FIGS. 10 to 11B, in the medical tube fixing apparatus **200a** of this embodiment, the adhesive member **220a** may be coupled horizontally at the center portion of the suture thread **212** unlike the fourth embodiment.

In an exemplary embodiment, the adhesive member **220a** may be made of a medical adhesive tape having a strip or band shape and a predetermined length and width. The adhesive member **220a** may include a tape **222a**, an adhesive **224a**, a release paper **226a**, and a stopper **228a**. The stopper **228a** also provides materials, shapes, and functions that are generally similar to those in FIG. 8. However, the stopper **228a** of this embodiment is fixed in the width direction at an end of the adhesive member **220a**. The stopper **228a** may be installed such that the adhesive member **220a** can be fixed at a proper position of the suture thread **212**. Here, the adhesive member **220a** may be provided so as to be adjustable in its position along the longitudinal direction of the suture thread **212** by the stopper **228a**.

Therefore, as shown in FIGS. 11A and 11B, the medical tube fixing apparatus **200** of this embodiment may be configured such that the incised site of the patient's skin **10** is sealed with the suture thread **212** and the needle **214**. Then, the medical tube **20**, together with the suture thread **212**, may be adhesively wrapped plural times by the adhesive member **220a** to fix the medical tube **20**.

The medical tube fixing apparatuses **200** and **200a** of the fourth and fifth embodiments described above can firmly fix the medical tube **20** to the patient's skin **10** using the suture thread **212**.

The foregoing is illustrative of exemplary embodiments of the present inventive concept and is not to be construed as limiting thereof. Although a few exemplary embodiments have been described, those skilled in the art will readily appreciate that many modifications are possible in the exemplary embodiments without materially departing from the novel teachings and advantages of the present inventive concepts. Accordingly, all such modifications are intended to be included within the scope of the present inventive concepts as defined in the claims. Therefore, it is to be understood that the foregoing is illustrative of various exemplary embodiments and is not to be construed as limited to the specific exemplary embodiments disclosed, and that modifications to the disclosed exemplary embodiments, as well as other exemplary embodiments, are intended to be included within the scope of the appended claims.

What is claimed is:

1. A medical tube fixing apparatus, comprising:
  - a staple comprising a flat top crown and a leg perpendicularly extending from each of both longitudinal ends of the flat top crown, the staple is capable of being fixed to a site of patient's skin into which a medical tube is inserted, by a skin stapler; and
  - an adhesive member comprising a transparent or semi-transparent tape; an adhesive layer coated on one side of the tape; and a release paper attached to the adhesive layer and being capable of being released from the adhesive layer, the adhesive member being an elongated band having a longitudinal end fixedly coupled

9

with the flat top crown of the staple, the other longitudinal end of the elongated band configured to adhesively wound around an outer surface of the medical tube at least one turn after the release paper is released from the adhesive, thereby fixing the medical tube to the staple.

2. A medical tube fixing apparatus, comprising:

a staple comprising a flat top crown and a leg perpendicularly extending from each of both longitudinal ends of the flat top crown, the staple is capable of being fixed to a site of patient's skin into which a medical tube is inserted, by a skin stapler; and

an adhesive member, comprising a band-shaped main adhesive portion having a longitudinal end fixed to the flat top crown and extending in a direction perpendicular to the flat top crown by a predetermined length; and at least one band-shaped auxiliary adhesive portion extending from one lateral side or both lateral sides of the band-shaped main adhesive portion in one direction or in opposite two directions parallel to the flat top crown, wherein each of the band-shaped main adhesive portion and the at least one band-shaped auxiliary adhesive portion comprises a transparent or semi-transparent tape having an adhesive layer coated on one side of the tape and a release paper attached to the adhesive layer and capable of being released from the adhesive layer,

10

wherein the band-shaped main adhesive portion is capable of being attached to the medical tube along an axial direction of the medical tube, and the at least one band-shaped auxiliary adhesive portion is capable of being wound around the medical tube in a circumferential direction of the medical tube.

3. A medical tube fixing apparatus, comprising:

a suture thread, being joined to a needle, for suturing an incised site of a patient's skin into which a medical tube is inserted; and

an adhesive member, being provided in a strip or band shape and fixedly coupled to one end of the suture thread, for adhesively wrapping an outer surface of the medical tube together with the suture thread a plurality of turns outside the skin sutured by the suture thread, thereby fixing the medical tube to the suture thread.

4. The medical tube fixing apparatus according to claim 3, wherein the adhesive member comprises a stopper configured to be coupled with the one end of the suture thread and to prevent the adhesive member from being inserted into the incised site of the patient's skin.

5. The medical tube fixing apparatus according to claim 3, wherein the adhesive member comprises a transparent or semi-transparent tape; an adhesive layer coated on one side of the tape; and a release paper attached to the adhesive layer and capable of being released from the adhesive layer.

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